THE REGULATIONS GOVERNING THE MILK TEST AT THE OMAHA EXPOSITION.

As we have had considerable discussion in these columns of late as to the best method of conducting a milk test at a fair, it may be interesting to our readers to know the scale of points to be used in the milk competition at the Omaha exhibition. The following is the scale of points to be used and the rules and regulations governing the test:

"Rule 1. The test shall be for ten days, and shall be open to all cows. Heifers with first calf shall be in a class by themselves.

Rule 2. All cows entered for competition shall be under control of the committee in charge during the test and for two days prior thereto. They shall be fed and milked under the direction of the committee, the owner of the cow being allowed to name the person who cares for and milks the cow. They may receive at the direction of the owner any amount or proportion of the following foods, viz.: corn and oats ground, wheat, bran, linseed meal, cottonseed meal, corn silage, clover hay, timothy hay, and prairie hay.

All feed used shall be weighed and samples analyzed, and each cow shall be charged with the dry matter therein. But the same feeds and the same proportion of each shall be continued throughout the test in each case. When the ration is adopted only the amount of feed can be varied. Each cow shall be charged with the total amount of food given, no allowance being made for food not consumed.

Rule 3. As a basis for comparison one point shall be allowed for each pound of solids not fat, and ten points for each pound of fat contained in the milk. The points obtained in this way shall be increased by one per cent. for each week of lactation after the first month. In no case, however, shall more than twenty-five per cent. increase be allowed for advancing lactation. The number of points obtained in this way divided by the number of pounds of dry matter in the food consumed during the test will give a factor which represents the relative food economy of the cows being tested.

This factor multiplied by an arbitrary number (five is recommended) shall be added for each day of the test, and the sum shall constitute the score. The cow having the largest score obtained in this way shall be considered the best.

Premiums of equal merit are offered for cows and for heifers; in case of tie between cows and heifers each shall be entitled to the same premium.

The chief feature of this scale, as compared with the tests conducted at the fairs here, is the fact that the food is taken into account. It is hardly possible to do this satisfactorily with less than a ten days' test. Would it not be possible to conduct such a test during the Toronto Exhibition? Of course it is now too late to do anything this year. But the plan is worth considering for another year; and if all the varied interests concerned would co-operate we could have at the Industrial Fair for 1899 a ten-day milk test in which the food consumed could be taken into account.

CROP ESTIMATES FOR ONTARIO.

The Ontario Department of Agriculture has issued its annual estimate of the crops for the present year. The acreage given is final, but the yield of grain will be revised in November from actual threshing results. The following is a summary of the report:

Fall Wheat.—1,048,182 acres, yield 25,305,890 bushels, an average of 24.1 bushels per acre. In 1897 the estimated yield was 23,988,051 bushels, averaging 25.2 bushels per acre. The average for the sixteen years, 1882-97, was 20.2 bushels per acre. The acreage this year is the largest since 1883, when 1,097,210 acres yielded only 10.6 bushels per acre. On the basis of acreage, yield, and quality the Ontario fall wheat crop for 1898 may be set down as the best since 1883 at least. There were only 25,159 acres plowed up this spring, as against 55,477 in 1897, which may partly account for the big increase this year.

Spring Wheat. — 389,205 acres, yielding 6,714,516 bushels, an average of 17.3 bushels per acre. In 1897, 323,305 acres gave 4,868,101 bushels, or 15.1 bushels per acre. The crop this year is the largest since 1891, in which year 510,634 acres gave 10,711,538 bushels or 21 bushels per acre.

Barley.—438,734 acres give 12,048,245 bushels, or 27.5 bushels per acre. In 1897, 451,515 acres gave 12,021,779 bushels, or 26.6 bushels per acre. The acreage has fallen steadily since 1890, though the yield of late years has been about stationary.

Oats.—2,376,360 acres yielding 82,132,026 bushels, or 34.5 bushels per acre. In 1897, 2,432,491 acres gave 86,318,128 bushels, or 35.5 bushels per acre. The great increase of recent years may be seen from the fact that the average for the past sixteen years was 1,875,240 acres, giving 64,476,051 bushels, or 34.4 bushels per acre.

Peas.—865,961 acres gave 15,681,782 bushels, or 18.1 bushels per acre. In 1897, 896,735 acres gave 13,867,093 bushels, or 15.5 bushels per acre. The average for the past sixteen years was 19.9 bushels per acre.

Hay and Clover.—2,453,503 acres yield 4,399,063 tons, or 1.79 tons per acre. This is an increase of 587,545 tons over 1897, and over 1,000,000 tons above the average of 1882-97. The largest previous yield was 4,963,557 tons in 1893. The yield per acre has been equalled only once since 1887—in 1893.

Other Crops. — Acreage alone is given. Corn for husking has fallen from 335,030 acres in 1897 to 330,748 in 1898, and for the silo from 209,005 in 1897 to 189,948 acres in 1898. The acreage of potatoes is practically the same as last year, or 169,946. The acreage of tobacco has increased from 705 acres in 1897 to 7,871 acres in 1898.

Live Stock on hand.—The numbers of live stock are for the 1st of July of each year. Horses were as follows: 611,241 in 1898, 613,670 in 1897, and 624,749 in 1896. Cattle: 2,216,943 in 1898, 2,102,326 in 1897, and 2,181,958 in 1896. Milch cows show an increase of 26,000 in the past year, and store cattle a decrease of 20,000. Sheep: 1,677,014 in 1898, 1,670,350 in 1897, and 1,849,348 in 1896. Swine made a large increase from 1,269,631 in 1896 and 1,284963 in 1897 to 1,642,787 in 1898. There is an increase of 3 5,000 in young swine over last year. Poultry are 9,084,473 in 1898, 8,435,341 in 1897, and 7,734,167 in 1896.

Live Stock sold.—The figures are for the twelve months preceding July 1st in each year. Horses are about the same as the previous two years—44,404. Cattle are 552,485 in 1898, 503,007 in 1897, and 436,451 in 1896. Sheep show a decrease—766,876 in 1896 to 732,872 in 1897, and to 664,239 in 1898. Swine sold increased from 1,304,359 in 1896, and 1,399,967 in 1897 to 1,592,697 in 1898. Poultry show a slight increase over the previous year.

The wool clip was 5,104,686 pounds, as compared with 5,139,894 in 1897. There are 190,080 colonies of bees in Ontario.

OUR DAIRY SCHOOLS.

According to its population Canada is as well equipped with dairy schools as any other country in the world. Not only are they as numerous in proportion to the number of inhabitants as elsewhere, but the equipment of the schools, and the staffs of instructors and teachers are equal to, if not superior, to those in any other country. This is as it should be, for Canada is the leading dairy country in the world to-day and should have an efficient teaching staff on practical dairy subjects. As yet we have received the annual announcements of only two schools.

GUELPH DAIRY SCHOOL.

This school is an important branch of the Dairy Department of the Ontario Agricultural College of Guelph, and is under the immediate charge of H. H. Dean, B.S.A., Professor of Dairy Husbandry. The next session opens on January 4th and will close on March 24th, 1899. The course is a comprehensive one and includes a practical training in cheese-making, cream separators, butter-making, milk testing and home dairying, besides a number of lectures on kindred subjects, such as dairy farming, dairy bacteriology, etc. The staff of instructors for the coming term will be the same as last year, which is a guarantee that good, effective work will be done and that the students who will attend will receive a good drilling in practical dairying.

KINGSTON DAIRY SCHOOL.

The Kingston school is a branch of the School of Mining and Agriculture located at Kingston, Ontario. It is under the supervision of the Ontario Department of Agriculture, with Mr. J. A. Ruddick resident superintendent in charge. The next session of this school opens on November 25, 1898. In addition to a long course of six weeks, there are six short courses of two weeks each arranged for. The long course opens on January 26, and is intended to afford those who have the time and the inclination an opportunity for more thorough training than it is possible to get in the other courses. The same staff of instructors will be on duty as last year, with the exception of Mr. J. A. Kerr, who will act as instructor in butter-making. Mr. Kerr is one of the regular instructors employed by the Eastern Butter and Cheese Association, and will no doubt give a good account of himself.

Cheese and butter-makers should bear these announcements in mind and arrange to spend some time at either one of these schools. In many ways it will be advantageous for a maker to spend a week or two at these institutions every winter. The brushing up that he will get will make him a better workman and better fitted to discharge the important duties he is called upon to perform as a manager of a cheese or butter factory.

TO PREVENT CONTAGION OF TUBERCULOSIS.

Issued by Ohio Experimental Station.

Recent developments, together with the historical data concerning tuberculosis among the bovine kind, has excited some curiosity among thinking people as to the possibility of rendering animals exposed less liable to the disease than would seem possible under average or normal conditions. Physicians and veterianarians generally have arrived at the conclusion that the greatest danger comes from the germs floating in the dry air or dust. To this end they argue that persons with consumption should not be allowed to spit upon sidewalks, on floors in the house, about the streets, in street cars or any other places frequented by others; not that there is danger from the spittle as such, but from the dried residue, which is regarded as the most potent factor in spreading the disease from one person to another. The reasoning seems plausible, and, if it is true of the human subject, it should apply equally forcibly to the animal kind.

The Ohio Experiment Station assumes this theory as correct, and, since the disease has developed among their dairy herd, the plan has been adopted of keeping the stable atmosphere constantly moist. The floors are of cement, and are swept clean twice a day. Before each sweeping the entire inside is lightly sprinkled, just sufficiently to allay all dust. After sweeping, and while the floors are yet moist, salt of an inferior grade is thinly scattered over them, aiding materially in keeping the atmosphere of the entire stable in a moist condition, and thus reducing the chances of germs being transmitted in the dust. Animals in the same stables not affected are less liable to receive germs, and the attendants enjoy greater safety, if, as it has been alleged, man can contract the disease by working among animals affected with tuberculosis.

This treatment is a comparatively inexpensive one. The water can be secured from the well or cistern connected with every well-regulated barn, and the salt can be purchased at from $3 to $5 per ton. In addition to the moist treatment, the barn is opened and thoroughly aired every day, even in the coldest weather, and every precaution is taken to prevent the atmosphere from becoming close or stuffy. This practical work seems to demonstrate that the cattle are in no way uncomfortable under the treatment, the attendants enjoy as good health as ever, and the spread of the disease has been reduced to a minimum.

FEEDING HORSES CLOVER.

Very few farmers ever think of feeding clover hay to their horses, says *The Michigan Farmer*. They have always regarded it as dangerous, and preferred feeding timothy or mixed timothy, because no danger resulted from its use. The first objection to clover hay is its dustiness, the result of its leaves breaking into very fine pieces because they had become so dry as to be very brittle. Timothy has no leaves to break up in this way. The other objection to clover is that horses will eat so much of it, if allowed, as to injure themselves. The first ob-